

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1, 3-17, 19-28 and 30-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "a third slice level voltage"; however, this signal is out of sequence given that the other slice level voltage recited in claim 1 is "a first slice level voltage". Therefore, it raises question as to whether the claim is missing "a second slice level voltage" in order to render the invention operable.

Claim 17 has similar issue as claim 1.

It is suggested to change "a third slice level voltage" in claim 1 to "a second slice level voltage" and "a second slice level voltage" in claim 31 to "a third slice level voltage". These changes will not cause inconsistency between the claims and the description of the subject specification because according to par. [0160], it describes "the slice level voltage such as the slice level voltage H, G used for the first detection of a focus error signal in S4 corresponds to the first slice level voltage of the present invention, the slice level voltage such as the slice level voltage H, G used for the second detection of a focus error signal during approaching movement in S6 corresponds to the second slice level voltage of the present invention, the slice level voltage such as the slice level voltage H, G used for the second detection of a focus error signal during backward movement corresponds to the third slice level voltage of the present invention".

Therefore, the limitation regarding "when said control means newly detects that the voltage of said focus error signal has reached **a third slice level voltage** corresponding to displacement of predetermined magnitude from said reference potential **before the amount of movement of said objective lens reaches said predetermined amount of movement**, said control means controls beam spot positioning so as to focus the optical spot" corresponds to "the slice level voltage H, G used for the second detection of a focus error signal **during approaching movement in S6 corresponds to the second slice level voltage** of the present invention". Further, the limitation regarding "when said control means detects that said objective lens has reached **a second slice level voltage** corresponding to displacement of predetermined magnitude from the reference potential **for the period of said backward movement**, said control means controls beam spot positioning so as to focus the optical spot" corresponds to "the slice level voltage such as the slice level voltage H, G used for the second detection of a focus error signal **during backward movement corresponds to the third slice level voltage** of the present invention".

Accordingly, the current state of the claims is inconsistent with the description provided in par. [0106] of the specification.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claim 30 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The United States Patent and Trademark Office (USPTO) is obliged to give claims their broadest reasonable interpretation consistent with the specification during proceedings before the USPTO. See *In re Zletz*, 893 F.2d 319 (Fed. Cir. 1989) (during patent examination the pending claims must be interpreted as broadly as their terms reasonably allow). The broadest reasonable interpretation of a claim drawn to a computer readable medium (also called machine readable medium and other such variations) typically covers forms of non-transitory tangible media and transitory propagating signals per se in view of the ordinary and customary meaning of computer readable media, particularly when the specification is silent.

Therefore, a claim drawn to such a computer readable medium that covers both transitory and non-transitory embodiments may be amended to narrow the claim to cover only statutory embodiments to avoid a rejection under 35 U.S.C 101 by adding the limitation “non-transitory” to the claim.

Response to Arguments

5. Applicant’s arguments, see page 10, filed 12/31/09, with respect to claims 1, 3-8, 14-17, 19-24, and 30-31 being rejected under 35 U.S.C 103(a) have been fully considered and are persuasive. The rejection under 35 U.S.C 103(a) of claims 1, 3-8, 14-17, 19-24 and 30-31 has been withdrawn.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LIXI CHOW whose telephone number is (571)272-7571. The examiner can normally be reached on Mon-Fri, 8:30am to 6:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571-272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Lixi Chow/
Examiner, Art Unit 2627